January 2, 2014 1420 East 6th Ave. P.O. Box 200701 Helena, MT 59620-0701

Environmental Quality Council

Montana Department of Environmental Quality

Montana Department of Fish, Wildlife and Parks
Fisheries Division
Endangered Species Coordinator
Bozeman Office

Montana State Library, Helena

Montana State Library, Helena
MT Environmental Information Center
Montana Audubon Council
Montana Wildlife Federation
Gallatin Conservation District, P.O. Box 569, Manhattan, MT 59741
Wayne Hadley, 1016 Eastside Road, Deer Lodge, MT 59722
Montana River Action, 304 N 18th Ave., Bozeman, MT 59715
U.S. Army Corp of Engineers, Helena
U.S. Fish and Wildlife Service, Helena
State Historic Preservation Office, Helena
Bozeman Creek Enhancement Committee, 4030 Sourdough Road, Bozeman, MT 59715

City of Bozeman, ATTN Mitchell Overton, 814 N. Bozeman, Bozeman, MT 59715

Ladies and Gentlemen:

Please find enclosed an Environmental Assessment (EA) prepared for the Future Fisheries Improvement Program. The Program tentatively plans to provide partial funding to re-construct approximately 820 feet of a straightened reach of Bozeman Creek as it flows through the city of Bozeman's Bogart Park. Bozeman Creek is a tributary to the East Gallatin River. The intent of the project is to improve the stream's amenities for nature based recreation and environmental education purposes. The project site is located within the city limits of Bozeman in Gallatin County.

Please submit any comments that you have by 5:00 P.M., February 3, 2014 to Montana Fish, Wildlife & Parks at the address listed above. The funding for this project through the Future Fisheries Improvement Program is contingent upon approval being granted by the Fish, Wildlife and Parks Commission. If you have any questions, feel free to contact me at (406) 444-2432. Please note that this draft EA will be considered as final if no substantive comments are received by the deadline listed above.

Sincerely,

Mark Lere, Program Officer Habitat Bureau Fisheries Division e-mail: mlere@mt.gov

ENVIRONMENTAL ASSESSMENT

Fisheries Division Montana Fish, Wildlife & Parks Bozeman Creek Channel Restoration Project

General Purpose: The 1995 Montana Legislature enacted sections 87-1-272 through 273, MCA that directs the Montana Fish, Wildlife and Parks (FWP) to administer a Future Fisheries Improvement Program. The program involves providing funding for physical projects to restore degraded fish habitat in rivers and lakes for the purpose of improving wild fisheries. The legislature established an earmarked funding account to help accomplish this goal.

The Future Fisheries Improvement Program is proposing to provide partial funding to a project calling for the restoration of a reach of Bozeman Creek within the city of Bozeman's Bogart Park. Currently, this reach of Bozeman Creek is channelized with high and unstable banks, no accessible floodplain and low aquatic habitat diversity. The intent of the project is to enhance aquatic habitat in an 820-foot stream reach to improve the stream's value as a community amenity and improve fishing opportunities. The project would be located within the city limits of Bozeman.

- I. <u>Location of Project</u>: The project site is located on Bozeman Creek, a tributary to the East Gallatin River, within Township 2 South, Range 6 East, Section 7 in Gallatin County (Attachment 1).
- II. <u>Need for the Project</u>: One goal within Montana Fish, Wildlife and Parks six-year operations plan for the fisheries program is to "restore and enhance degraded fisheries habitats" by implementing habitat restoration projects and administering the Future Fisheries Improvement Program to restore important habitats on private and public lands. This proposed project would help meet this goal.

Bozeman Creek is a tributary to the East Gallatin River that supports a mixed assemblage of nonnative trout (brown, rainbow and brook), as well as native suckers, mountain whitefish and sculpin. Portions of the stream corridor, as they flow through the heart of Bozeman, are highly degraded. The proposed project reach, located within Bogart Park, has been channelized and currently displays high and unstable banks, the lack of a functional floodplain and poor aquatic habitat diversity. This proposed project would restore the dimension, pattern, and profile of 820 feet of channel; re-establish a functional floodplain; and enhance the vegetative community within the riparian corridor. Projects limits will be hardened with rock to reduce the potential of channel migration into existing park infrastructure.

III. Scope of the Project:

This project would involve reconstructing about 820 feet of new channel where the stream is currently straightened (Attachment 2). The project would involve changing the alignment of the straightened channel, expanding floodplain capacity and establishing a vegetated riparian corridor. Existing infrastructure in the park greatly constrains opportunities for establishing a natural, fully meandering channel. Within these constraints, two new meander bends would be constructed and an inset floodplain would be excavated. The new meanders will be designed

with bed and bank features suitable for pool and riffle formation. Newly constructed stream banks would be protected with a variety of treatments, including cobble revetment, cobble toe with biodegradable coir soil lifts and larger rock toe armor at the edge of the floodplain (Attachment 3). Some vegetation will need to be removed for the channel realignment, but will be replaced with a greater amount of native vegetation. All vegetation zones will be re-vegetated with native trees, shrubs, forbs and grass species. This channel restoration effort is a small part of a larger community park enhancement project involving the construction of a new multi-use trail system, a footbridge with viewing platform and upgraded playground equipment. The total cost for this project is estimated at \$603,330. Of this total, the Future Fisheries Improvement Program would be contributing up to \$30,000. The remaining funds will come from other sources and from in-kind services:

Contributor	In-kind services	In-kind cash	
City of Bozeman		\$347,330	
FWP Recreation Trails Grant		\$90,000	
DNRC Renewable Resource		\$100,000	
Grant			
Trout Unlimited (Embrace a	\$5,000	\$15,000	
Stream)	\$3,000	\$13,000	
Gallatin Valley Land Trust	\$8,000	\$8,000	

IV. Environmental Impact Checklist:

Please see attached checklist.

V. <u>Explanation of Impacts to the Physical Environment</u>

1. Terrestrial and aquatic life habitats.

Non-native brown trout, rainbow trout and brook trout are the most prevalent salmonids in this reach of Bozeman Creek. Trout populations residing in the stream currently appear to be suppressed due to poor habitat quality. This proposed project is expected to enhance fish populations by improving overall habitat conditions in a reach of Bozeman Creek by creating more diversity in channel morphology, re-establishing a functional floodplain and enhancing the riparian vegetation community. Re-vegetation efforts within the riparian corridor also are expected to improve habitat for riparian dependent wildlife.

2. Water quantity, quality and distribution.

Channel reconstruction would entail a significant amount of earthwork within and adjacent to the active channel. Best management practices would be implemented to control sedimentation and erosion, including installation of silt fence, straw wattles and track pads. Construction dewatering may need to include temporary coffer dams and pumps to keep water away from areas under construction. Short-term increases in turbidity will occur during project construction. To minimize turbidity, operation of equipment in the stream channel will be minimized to the extent practicable. The

Department of Environmental Quality will be contacted to determine narrative conditions required to meet short-term water quality standards and protect aquatic biota (318 authorization), as well as to obtain general construction dewatering permit. A 310 permit (Montana Natural Streambed and Land Preservation Act) will be obtained from the local conservation district, and the U.S. Army Corp of Engineers will be contacted for requirements to meet the federal Clean Water Act (404 permit). Additionally, a floodplain permit will be obtained from Gallatin County.

3. Geology and soil quality, stability and moisture.

Soils along the stream margin and in the project vicinity would be temporarily disturbed during construction. Proposed re-vegetation efforts and best management practices during construction would mitigation for this disturbance.

4. Vegetation cover, quantity and quality.

Vegetation and cover within the project footprint would be disturbed during the period of construction. Some existing vegetation will be removed to allow for channel realignment and an inset floodplain. Vegetation lost as a result of the project will be replaced by a greater amount of native vegetation. The re-vegetation goal for the project is to establish permanent, native plant species within the stream corridor that are appropriate for a broad range of hydrologic fluctuations. The project is expected to enhance the overall riparian vegetative community.

5. Aesthetics.

In the short term, aesthetics would be adversely impacted during construction due to ground disturbance and the presence of heavy equipment. In the long term, the proposed project would enhance aesthetics in this reach of Bozeman Creek by restoring a straightened reach of stream and enhancing the riparian corridor.

7. Historic and archeological sites.

The project area has been disturbed by past channelization and by the various construction activities associated with a city park. As a result, there is a very low likelihood that cultural properties will be impacted by the proposed project. Should cultural materials be inadvertently discovered during the project, the State Historic Preservation Office will be contacted and the site will be investigated.

VI. Explanation of Impacts on the Human Environment.

7. Access to & quality of recreational activities.

During the period of construction, portions of the city park will need to be closed to the public for safety purposes. Once completed, the project is expected to enhance the recreational amenities that the park provides.

13. Locally adopted environmental plans and goals.

The Bozeman Creek Enhancement Committee has developed restoration plans at Bogart Park, as well as a larger Bozeman Creek corridor enhancement effort, through an extensive community involvement process. The Bozeman community, park users and the Bogart Park Neighborhood Association have had numerous opportunities to participate in the generation and refinement of the restoration design.

VII. <u>Discussion and Evaluation of Reasonable Alternatives</u>.

1. No Action Alternative

If no funding is provided through the Future Fisheries Improvement Program, the applicant would have to either seek additional sources of funding to complete the project or a reach of Bozeman Creek within a city park would continue to be degraded. Aquatic habitat diversity would remain low and fish populations within this reach of Bozeman Creek would remain below potential.

2. The Proposed Alternative

The proposed alternative intends to provide partial funding through the Future Fisheries Improvement Program to restore a straightened and degraded reach of Bozeman Creek within the boundaries of Bogart Park. The proposed project would improve aquatic habitat and benefit resident fish populations. Additionally, the project is expected to heighten the value of the park for nature-based recreation and educational purposes, while improving safety for park users.

VIII. Environmental Assessment Conclusion Section

1. Is an EIS required? No.

We conclude from this review that the proposed activities will have a positive impact on the physical and human environment.

2. Level of public involvement.

The project application to the Future Fisheries Improvement Program has been posted on the Montana Fish, Wildlife and Parks webpage for public comment. No comments have been received to date. The proposed project was reviewed and supported by the public review panel of the Future Fisheries Improvement Program. The proposed project also will be reviewed by the Fish, Wildlife and Parks Commission and <u>funding will be contingent upon their approval</u>. The Environmental Assessment (EA) is being distributed to all individuals and groups listed on the cover letter. The EA also will be published on Montana Fish, Wildlife and Parks webpage: fwp.mt.gov.

3. Duration of comment period?

Public comment will be accepted through 5:00 PM on February 3, 2014.

4. Person responsible for preparing the EA.

Mark Lere, Program Officer Habitat Bureau Fisheries Division Montana Fish, Wildlife and Parks PO Box 200701 Helena, MT 59620

Telephone: (406) 444-2432 e-mail: mlere@mt.gov

MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS

1420 E 6th Ave, PO BOX 200701, Helena, MT 59620-0701 (406) 444-2535

ENVIRONMENTAL ASSESSMENT

Project Title: Bozeman Creek Channel Restoration Project

Division/Bureau: Fisheries Division -Future Fisheries Improvement

Description of Project: The Future Fisheries Improvement Program tentatively plans to provide partial funding to a project calling for the restoration of a reach of Bozeman Creek within the city of Bozeman's Bogart Park. The intent of the project is to enhance overall aquatic habitat in an 820-foot reach to improve the stream's value as a community amenity and improve fishing opportunities. Bozeman Creek is a tributary to the East Gallatin River. The project would be located within the city limits of Bozeman in Gallatin County.

POTENTIAL IMPACT ON PHYSICAL ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
Terrestrial & aquatic life and habitats			X			X
2. Water quality, quantity & distribution			X			X
3. Geology & soil quality, stability & moisture			X			X
4. Vegetation cover, quantity & quality			X			X
5. Aesthetics			X			X
6. Air quality				X		
7. Unique, endangered, fragile, or limited environmental resources				X		
8. Demands on environmental resources of land, water, air & energy				X		
9. Historical & archaeological sites				X		X

POTENTIAL IMPACTS ON THE HUMAN ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Social structures & mores				X		
2. Cultural uniqueness & diversity				X		
3. Local & state tax base & tax revenue				X		
Agricultural or industrial production				X		
5. Human health				X		
6. Quantity & distribution of community & personal income				X		
7. Access to & quality of recreational and wilderness activities			X			X
8. Quantity & distribution of employment				X		
9. Distribution & density of population & housing				X		
10. Demands for government services				X		
11. Industrial & commercial activity				X		
12. Demands for energy				X		
13. Locally adopted environmental plans & goals			X			X
14. Transportation networks & traffic flows				X		

Other groups or agencies contacted or which may have overlapping jurisdiction: <u>City of Bozeman</u>, Gallatin County, Gallatin Conservation District, US Fish and Wildlife Service, US Army Corp of Engineers, Montana Department of Environmental Quality, State Historic Preservation Office

Individuals or groups contributing to this EA <u>Gary Weiner, National Park Service</u> Recommendation concerning preparation of EIS <u>No EIS required.</u>

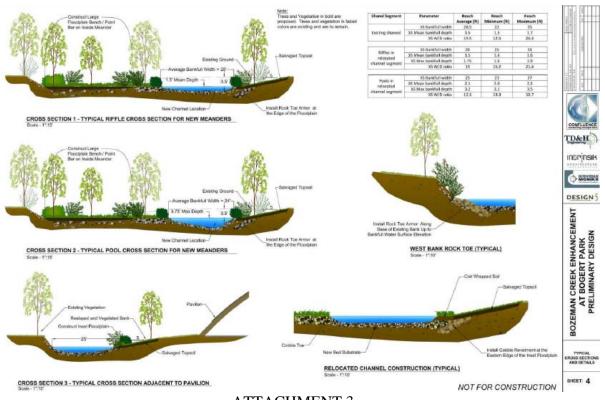
EA prepared by: Mark Lere Date: December 24, 2013



ATTACHMENT 1



ATTACHMENT 2



ATTACHMENT 3